Application No.: 10/579,215

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

 (currently amended): A halogenated bisdiarylaminopolycyclic aromatic monomer represented by the following formula

formula:

wherein Ar and Ar' are each independently substituted or unsubstituted aryl groups and Z is a polycyclic arylene group, wherein at least one of the Ar' groups contains a haloaryl group

wherein each R' is independently a C_1 - C_{20} alkyl group, a carbo- C_1 - C_{20} -alkoxy group, a C_1 - C_{20} -alkoxy group, or a C_6 - C_{40} aryl group.

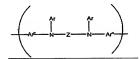
2.-3. (canceled).

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4. (currently amended): The monomer of Claim 13 wherein each R' is methyl, ethyl, carbomethoxy, carboethoxy, methoxy, ethoxy, or hexyloxy, and Z is selected from the group consisting of 2,1,3-benzothiadiazole-4,7-diyls, 9,9-disubstituted fluorene-2,7-diyls, naphthalene-1,4-diyls, anthracene-9,10-diyls, and ouinoxaline-5,8-diyls.

5. (canceled).

(currently amended): <u>AThe polymer of Claim 5 comprising a backbone containing</u>
 structural units of a bisdiarylaminopolycyclic aromatic monomer as shown:



wherein each Ar is independently a substituted or unsubstituted aryl group; each Ar" is a substituted or unsubstituted arylene group; and Z is a polycyclic arylene group; and

which further comprises-structural units selected from the group consisting of 1,4phenylenes, 1,3- phenylenes, 1,2- phenylenes, 4,4'biphenylenes, naphthalene-1,4-diyls,
naphthalene-2,6-diyls, furan-2,5-diyls, thiophene-2,5-diyls, 2,2'-bithiophene-5,5-diyls,
anthracenes-9,10-diyls, 2,1,3-benzothiadiazoles-4,7-diyls, N-substituted carbazole-3,6-diyls,
N-substituted carbazole-2,7-diyls, dibenzosilole-3,8-diyls, dibenzosilole-4,7-diyls, N-substitutedphenothiazine-3,7-diyls, N-substituted-phenoxazine-3,7-diyls, triarylamine-diyls including
triphenylamine-4,4'-diyls, diphenyl-p-tolylamine-4,4'-diyls, and N,N-diphenylaniline-3,5-diyls,

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N,N,N',N'-tetraaryl-1,4-diaminobenzene-diyls, N,N,N',N'-tetraarylbenzidine-diyls, arylsilane-diyls, and 9,9-disubstituted fluorenes-2,7-diyls.

 (currently amended): The polymer of Claim 5 comprising a backbone containing structural units of a bisdiarylaminopolycyclic aromatic monomer as shown:

wherein each Ar is independently a substituted or unsubstituted aryl group; each Ar" is a substituted or unsubstituted arylene group; and Z is a polycyclic arylene group, and wherein the polymer backbone further comprises structural units selected from the group consisting of 9,9-bis(4-hexyloxyphenyl)fluorene-2,7-diyl, 9,9-dioctylfluorene-2,7-diyl, 9,9-dihexylfluorene-2,7-diyl, and 2,1,3-benzothiadiazol-4,7-diyl.

8. (currently amended): The polymer comprising a backbone containing structural units of a bisdiarylaminopolycyclic aromatic monomer as shown:

of Claim 5-wherein Ar is selected from the group consisting of methylphenyl, ethylphenyl, carbomethoxyphenyl, carboethoxyphenyl, methoxyphenyl, ethoxyphenyl, and

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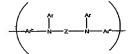
hexyloxyphenyl; Ar" is phenylene; and Z is selected from the group consisting of 2,1,3-benzothiadiazole-4,7-diyls, 9,9-disubstitated fluorene-2,7-diyls, naphthalene-1,4-diyls, anthracene-9,10-diyls, and quinoxaline-5,8-diyls.

9. (original): The polymer of Claim 8 wherein Ar is p-methylphenyl and Z is selected from the group consisting of 2,1,3-benzothiadiazole-4,7-diyl, 9,9-bis(4-hexyloxyphenyl)fluorene-2,7-diyl, 9,9-dioctylfluorene-2,7-diyl, 9,9-dihexylfluorene-2,7-diyl, naphthalene-1,4-diyl, anthracene-9,10-diyl, and quinoxaline-5,8-diyl.

10. (currently amended): A composition comprising a mixture of the polymer of Claim 65 and a solvent for the polymer suitable for making an ink.

- 11. (currently amended): A composition comprising a mixture of the polymer of Claim 65 and another polymer selected from the group consisting of homo- or co-polymers (including terpolymers or higher) of polyacrylates, polymethacrylates, polystyrenes, polyesters, polymides, polyvinylenes, polycarbonates, polyvinyle ethers and esters, fluoropolymers, polycarbazoles, polyarylene vinylenes, polyarylenes, polythiophenes, polyfurans, polypyrroles, polypyridines, and polyfluorenes, and combinations thereof.
- 12. (original): An electronic device comprising a thin film of a polymer disposed between an anode and a cathode, which polymer has structural units as shown:

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wherein each Ar is independently a substituted or unsubstituted aryl group; each Ar is a substituted or unsubstituted arylene group; and Z is a polycyclic arylene group.

13. (original): The electronic device of Claim 12 wherein the polymer further includes structural units of 1,4-phenylenes, 1,3-phenylenes, 1,2-phenylenes, 4,4'-biphenylenes, naphthalene-1,4-diyls, naphthalene-2,6-diyls, furan-2,5-diyls, thiophene-2,5-diyls, 2,2'-bithiophene-5,5-diyls, anthracenes-9,10-diyls, 2,1,3-benzothiadiazoles-4,7-diyls, N-substituted carbazole-3,6-diyls, N-substituted carbazole-2,7-diyls, dibenzosilole-3,8-diyls, dibenzosilole-4,7-diyls, N-substituted-phenothiazine-3,7-diyls, N-substituted-phenoxazines-3,7-diyls, triarylamine-diyls including triphenylamine-4,4'-diyls, diphenyl-p-tolylamine-4,4'-diyls, and N,N-diphenylaniline-3,5-diyls, N,N,N',N'-tetraaryl-1,4-diaminobenzene-diyls, N,N,N',N'-tetraarylbenzidine-diyls, arylsilane-diyls, and 9,9-disubstituted fluorenes-2,7-diyls.

14. (original): The device of Claim 13 wherein Ar is *p*-methylphenyl, Ar" is phenyl, and Z is selected from the group consisting of 2,1,3-benzothiadiazole-4,7-diyl, 9,9-bis(4-hexyloxyphenyl)fluorene-2,7-diyl, 9,9-dihexylfluorene-2,7-diyl, naphthalene-1,4-diyl, anthracene-9,10-diyl, and quinoxaline-5,8-diyl.

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15. (new): The monomer of Claim 1 wherein Z is selected from the group consisting of 2,1,3-benzothiadiazole-4,7-diyl,, 9,9-disubstitated fluorene-2,7-diyls, naphthalene-1,4-diyls, anthracene-9,10-diyls, and quinoxaline-5,8-diyls.